U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are rec	quired to respond to a collection	n of information unless it displays a valid OMB contro	l numbe			
UTILITY	Attorney Docket No.	612.43765X00				
PATENT APPLICATION	First Inventor	BROTO, KARINE				
TRANSMITTAL y for new nonprovisional applications under 37 CFR 1.53(b))		METHOD FOR DETERMINING A SEISM WAVE VELOCITY MODEL IN A HETEROGENEOUS UNDERGROUND	PTO OTS			
	Title  Express Mail Label No.	FORMATION	S.C.			
	Express Wall Laber IVO.					

(Only for new nonprovi	isional	applications under 37	CFR 1.53(b))	Title		HETEROG   FORMATIO		INDERGROUND	PT 52
						T OTTAIN THE			<u> </u>
SEE MPEP chapt		PLICATION ELEM			ADDRESS	<i>TO:</i> Comm P.O. B	top Patent Ap nissioner for F dox 1450 ndria VA 2231	Patents	2278 U.S 10/8300
(Submit an  2. Applicant cl See 37 CFF  3. Specificatio (preferred a  -Descriptive -Cross Refe -Statement -Reference or a compu -Backgroun -Brief Sumr	origina laims s R 1.27. on arrange e title of erence t Regard to sequence to sequence ond of the mary of	[To ment set forth below) If the invention to Related Application ding Fed sponsored F uence listing, a table, ogram listing appending Invention	tal Pages: <b>16</b> ]  ns R & D		8. Nucleotide fif applicab a. Com b. Specificat i ii c. Stat		(Appendix) Acid Sequency y) e Form (CRF) Listing on: or CD-R (2 co	ce Submission	
-Detailed D -Claim(s) -Abstract of  4. Drawing(s)  5. Oath or Declaration a. Newly exe b. Copy from (for cont)  i. DE Sig Nat 1.6	f the Di (35 U.S.  n ecuted n a prio tinuatio ELETI gned sta	sclosure S.C. 113) [To	tal Sheets: 1] tal Sheets:]	l	10.	CFR 3.73(b) State there is an allish Translation principle. The translation principle iminary Amendum Receipt Postula be specific tified Copy of Poreign priority is spublication Receipt (B)(i). Applicas equivalent.	atement (issignee) a Document (isure FO-1449 Iment (MPEP (istard (MPEP (istard (istard))) ariority Docum (is claimed) quest under 3 ant must attack	Power of Attorney  f applicable)  Copies of IDS Cit  503)  ent(s)	
18. If a CONTINUIN or in an Application Contin Prior application infom For CONTINUATION Box 5b, is considered the incorporation can	n Data nuation mation: OR DIV	Sheet under 37 Company Divisional  Examiner: VISIONAL APPS only t of the disclosure of	FR 1.76:  Contin  Art Unit:  y: The entire discless of the accompanyir	uation-in-par osure of the	t (CIP) of prior prior application, ion or divisional a	application No. , from which a	.: n oath or ded l is hereby in	claration is supplied acorporated by refere	under
			19. COF	RRESPOND	ENCE ADDRESS				
Customer Number	er	020457					OR C	orrespondence addres	s below
Name		ANTONELLI, TER	RY, STOUT & K	RAUS, LLF	<del> </del>				
Address	-								
City	-			State			Zip Code		
Country	_			Telephone	(703) 312-6600	)	Fax	(703) 312-6666	
Name (Print/Type)	Don	ald E. Stout /	, /		Registration No. (			26,422	
Signature		<u> </u>	mill AL				Date	APRIL 23, 2004	

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS

PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Linder the Panerwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

99						Complete	-			
FEE TRANSMITTAL for FY 2004			Complete if Known Application Number							
						April 22 200	April 23, 2004			
							BROTO, KARINE			
			First Named Inventor Examiner Name			BROTO, KAI	VIVE .			
Effective 10/01/2003. Patent fees are subject to ar	nnual revision.	Exam	iner	Name						
Applicant claims small entity status. See 37 CFR 1.27			Art Unit							
TOTAL AMOUNT OF PAYMENT (\$)	914.00	Attorney Docket No.				612.43765X0	0			
METHOD OF PAYMENT (check all that a	apply)	FEE CALCULATION (continued)								
☐ Check	. Di None	ADDI"	TION	IAL F	EES					
□ Deposit Account:     □ Deposit Acc										
Deposit Account 01-2135	La	rge Enti	itv .Sr	mall En	titv					
Number U1-2133			+	-					Fee Paid	
Deposit Account Antonelli, Terry, Stout & Kraus, LLP	1	e Fee ode (\$) 51 130	c	ode	Fee (\$) 65 S	Fee Descrip Surcharge – late filin				
Name The Director is authorized to: (check all that apply)	10	52 50	- 1			Surcharge - late pro	-	or		
☐ Charge fee(s) indicated below ☐ Credit any overpa	yments		1		c	cover sheet	_			
Charge any additional fee(s) during the pendency of the	ils application.	53 130	- 1			Non-English specific		ninotics		
☐ Charge fee(s) indicated below, except for the filing fe		12 2,52 04 920	- 1		-	or filing a request for Requesting publication	-	nination		
to the above-identified deposit account.	18	04 920	'   "	004		Examination action	on or sirk prior to			
FEE CALCULATION	18	05 1,84	401 11	805		Requesting publicati Examiner action	ion of SIR after			
BASIC FILING FEE     Large Entity Small Entity	12	51 110	2	251	55 E	Extension for reply w	vithin first month			
Fee Fee Fee Fee Description	Fee Paid 12	52 420	2	252	210 E	Extension for reply w	vithin second mon	th		
Code (\$) Code (\$) 1001 770 2001 385 Utility filing fee	770	53 950	)   2:	253	475 E	Extension for reply w	vithin third month			
1002 340 2002 170 Design filing fee	I -	54 1,4				Extension for reply w		י		
1003 530 2003 265 Plant filing fee		55 2,0				Extension for reply w	vithin fifth month			
1004 770 2004 385 Reissue filing fee		01 330 02 330		401 402		Notice of Appeal	art of an opposi			
1005 160 2005 80 Provisional filing fee		02 330 03 290		403		Filing a brief in suppo Request for oral hea	- •			
SUBTOTAL (1)	14	51 1.5		451		Petition to institute a	-	edino		
	770	52 110	- 1			Petition to revive - u	•	-u.i.g		
2. EXTRA CLAIM FEES FOR UTILITY AND REIS	33UE	53 1,3	- 1			Petition to revive - u		V <sub>a</sub>		
	e Paid 15	01 1,3	30 2	501	665 L	Jtility issue fee (or re	eissue)			
Total Claims 28 -20** = 8 x 18.00 = 14	44.00 15	02 480	0 2	502	240 0	Design issue fee				
	.00 15	640	0   2	503	320 F	Plant issue fee			<u> </u>	
Claims		06 130	0 ] 1	460	130 F	Petitions to the Com	missioner			
		50 50	- 1	807		Processing fee unde				
Large Entity   Small Entity   Fee Fee Fee Fee <u>Fee Description</u>		06 180	- 1	806		Submission of Inform				
Code (\$) Code (\$) 1202 18 2202 9 Claims in excess of 20	80	21 40	8	021		Recording each pate property (times num		r		
1201 86 2201 43 Independent claims in exce	55 5. 5	109 770	0 2	809		Filing a submission a	ing a submission after final rejection			
1203 290 2203 145 Multiple dependent claim, if 1204 86 2204 43 *** Reissue independent claim	18	310 770	0 2	810	385 F	For each additional i	invention to be			
over original patent 1205 18 2205 9 ** Reissue claims in excess	of 20	301 770	0   2	801		Request for Continu		RCE)		
and over original patent	18	02 900		802	900 F	Request for expedite	ed examination	, i		
SUBTOTAL (2) \$ 144.					c	of a design application	on			
**or number previously paid, if greater, For Reissues, see above.			(specif	ry)	<del></del>					
	Reduced	by Ba	sic Filin	g Fee F	Paid	SUBTOTAL (3	3) (\$)	0.00		
SUBMITTED BY						Complete (if appl	licable)			
Name (Print/Type) Donald E. Stout , Registration No. (Attorney/Agent) 26,422 Telephone 703-					703-312-6	600				
Signature	IR Alat		-				Date	April 23, 2	004	

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Included on this form. Provide credit card information and authorization on P10-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer.

U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.